

## State of Illinois ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: September 16, 2020

TO: Jim Miles, Manager, BOW/DWPC/FOS

FROM: Joseph D. Stitely, P.E., BOW/DWPC/FOS - Marion

SUBJECT: Commonfields of Cahokia Water & Sewer District

August 26, 2020 CMOM/Collection System Inspection

On August 26, 2020, Gregg Sanders (BOW/Collinsville) and I met with Dennis Traiteur, Manager (618/410-7808) for the Commonfields of Cahokia Water & Sewer District. The purpose of the visit was to obtain an inventory of the district's lift stations and conduct a CMOM inspection. During the inspection we also inspected the 82<sup>nd</sup> Ex. 7(F) and the 82<sup>nd</sup> Ex. 7(F) stations in the "Ping Pong" area of Centreville.

Commonfields of Cahokia Sewer District serves approximately 8,100 residences (about 20,000 people). In addition to the Manager, the District currently has three full-time maintenance staff. The District currently has 27 lift stations in the collection system. Attached is a spreadsheet identifying each of the district's lift stations. The collection system is 100% separate sewer. According to Traiteur, only 8 of the 27 stations are currently in good working order. Attached is a listing of each of the district's stations. Most of the stations are operated via temporary submersible pumps. The collection system is mostly 8-inch and 10-inch concrete sewer mains that has deteriorated over time causing severe infiltration and inflow (I & I) issues. We inquired about a collection system maintenance program. He explained that he is the only worker with a CDL License to drive the jet truck, so they do not have a maintenance program. He indicated that they only jet the lines when there are issues. We inquired about the frequency in which lift stations are checked. He indicated that the new stations are checked every other day. The lift stations are not set up for a SCADA system and most of the stations are not equipped with high level alarms. We also inquired about alternative pumping capabilities. He explained that the District has a 6-inch portable diesel driven pump.

Specifically, we inquired about the "Ping Pong" area within Centreville. He indicated that this collection system was installed in the 1960's. The area utilizes 8-inch and 10-inch concrete sewer mains. This area has not been smoke-tested or televised. He explained that there are two lift stations within the 'Ping Pong" area. They are located at 82<sup>nd</sup> & Bluff and at 82<sup>nd</sup> & Ex. 7(F) He explained that the 82<sup>nd</sup> & Ex. 7(F) discharges into the 82<sup>nd</sup> & Ex. 7(F) is discharged into the East St. Louis collection system. I explained that I had previously observed a sanitary sewer

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overflow from a lateral cleanout on 82<sup>nd</sup> street. He indicated that the 82<sup>nd</sup> Ex. 7(F) has be operated manually. He indicated that District employees normally manually turn the pumps on daily. He also explained that he believes the sewer main is collapsed between the 82<sup>nd</sup> Ex. 7(F) and the overflowing lateral cleanout. He believes that the 8-inch concrete main has deteriorated over time causing the line to collapse. I inquired if the sewer main has ever been televised to determine if it is collapsed, and he indicated that it has not. We explained that we needed to observe the two lift stations and asked if he would accompany us and he agreed.

Traiteur also explained during the interview that that the sewer district was required by USEPA to obtain a CMOM plan. However, he indicated that they have not maintained the plan or used the plan for their collection system.

Initially, we drove to \$\frac{1}{2} \text{32}^{nd}\$ Street to observe the cleanout. At the time of our visit, raw sewage was actively discharging to the roadside ditch from the uncapped lateral cleanout. Sewage that is tributary to the \$2^n \text{Ex. 7(F)} is gravity flowing to the clean out and discharging to the ditch. Mr. Traiteur showed me the depression in the oil & chipped road where he thought the collapse was located. It is about 100 feet north of the overflowing cleanout on \$2^{nd}\$ Street. Next, we observed the \$2^{nd}\$ \$\text{Ex. 7(F)}\$ Station (see attached photographs). Traiteur manually turned on the lift station. He explained that when they turn the station on, the overflow from the cleanout will stop. He indicated that his workers must have missed turning on the station that day. I explained that turning that station manually on daily must be a priority. Next, we drove to the station located near the intersection of \$2^{nd}\$ Stree \$\text{Ex. 7(F)}\$ (see attached photograph). Walking up to the station, I heard that there was a significant flow discharging into the station's wet well. I explained that the station should not have that large of flow, considering it was during non-peak hours. I explained that District needed to smoke test the area to determine the source of the I & I.

We the stopped at the last manhole before the East St. Louis collection system. The manhole is located behind the Greater Faith Church at 82<sup>nd</sup> Street & Ridge Avenue. Traiteur removed the manhole lid so that we could inspect the manhole. The sewage flowing through the manhole from the Commonfields of Cahokia collection system into the East St. Louis collection system was clear in color (see attached photograph). It was not grey in appearance of domestic raw sewage. Again, we explained to Mr. Traiteur that the "Ping pong" area needed to be smoke tested in order to find the sources of I & I.

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Finally, before leaving the area, we again stopped at the overflowing clean out at 82<sup>nd</sup> Street. We noted that even though the lift station had been manually turned on earlier, sewage continued to trickle out of the lateral cleanout (see attached photograph).

Based upon the inspection, the following apparent violations are presented:

- 1. Section 12(a) of the Act, which provides, in part, that no person shall cause, threaten, or allow the discharge of any contaminant into the environment so as to cause or tend to cause water pollution.
- 2. Section 12(d) of the Act, which provides, in part, that no person shall deposit any contaminants upon the land in such place and manner so as to create a water pollution hazard.
- 3. Section 12(f) of the Act, which provides, in part, that no person shall cause, threaten, or allow the discharge of a contaminant into the waters of the State from any point source within the State without an NPDES permit for point source discharges.
- 4. Subtitle C, Section 304.106, provides, in part, that no effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity must be reduced to below obvious levels.
- 5. Subtitle C, Section 306.102(a), provides, in part, that all treatment works and associated facilities shall be so constructed and operated as to minimize violations of applicable standards during such contingencies as flooding, adverse weather, power failure, equipment failure, or maintenance, through such measures as multiple units, holding tanks, duplicate power sources, or such other measures as may be appropriate.
- 6. Subtitle C, Section 306.303, provides, in part, that excess infiltration into sewers shall be eliminated, and the maximum practicable flow shall be conveyed to treatment facilities.
- 7. Subtitle C, Section 306.304, provides, in part, that overflows from sanitary sewers are expressly prohibited.
- 8. Subtitle C, Section 309.102(a), provides, in part, that the discharge of any contaminant or pollutant by any person into the waters of the State from a point source or into a well shall be unlawful.

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The following recommendations are offered to assist the facility:

- 1. Immediately cease <u>all</u> overflows from your sanitary sewer collection system. At the time of the investigation, there was sanitary sewer overflow (SSO) occurring from a lateral cleanout at <a href="mailto:seperate">Ex. 6 personal Privacy (PP)</a> 82<sup>nd</sup> Street.
- 2. Repair or replace all nonfunctioning pumps within the lift station located near the intersections of North 82<sup>nd</sup> Street Ex. 7(F)
- 3. Provide an automatic float system within the lift station located near the intersections of North 82<sup>nd</sup> Street **Ex. 7(F)**
- 4. Repair or replace the electronic controls for the lift station located near the intersections of North 82<sup>nd</sup> Street and **Ex. 7(F)** These controls were in poor condition and appear to have reached the end of their design life.
- 5. Televise the section of sewer main from the lift station located near the intersections of North 82<sup>nd</sup> Street **Ex. 7(F)** and the cleanout SSO, which is approximately 670 feet southwest of the station.
- 6. Based upon the television data, repair or replace the collapsed section (a) of source main from the lift station located near the intersections of North 82<sup>nd</sup> Stree **Ex. 7(F)** and the lateral cleanout SSO.
- 7. Immediately initiate efforts to reduce inflow and infiltration into your wastewater collection system to minimize operation and maintenance problems during periods of significant rainfall. These efforts should include smoke testing of the sewer mains tributary to the North 82<sup>nd</sup> Street Ex. 7(F) lift station.
- 8. Based upon the smoke testing data, conduct point repairs and sewer main replacement of the sewer collection system tributary to the Belleview lift station.
- 9. Provide sealed manhole lids or elevate manholes in low lying areas to minimize stormwater inflow into the sewer collection system.

JDS:Commonfields Memo 082620/09-16-20

Attachments

cc: BOW/DWPC/FOS-Collinsville BOW/DWPC/RU